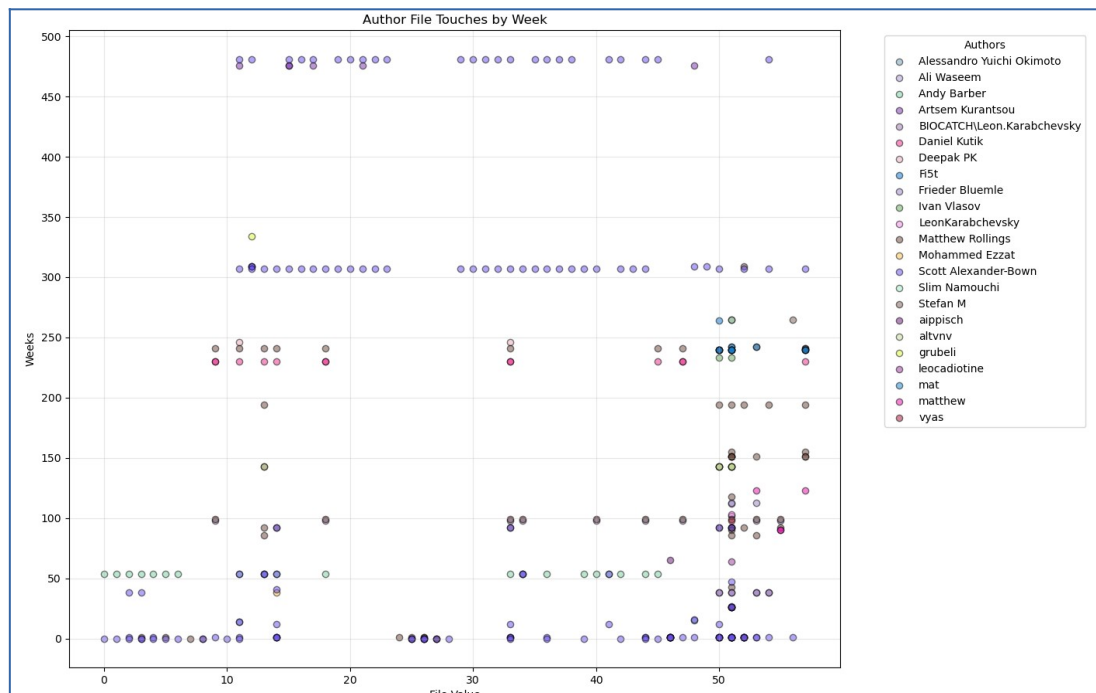


## Executive Summary

The project being developed, “Rootbeer,” is an open-source Android library that we’re looking to make available to the public on GitHub. The goal of Rootbeer is to help developers identify if devices are rooted, essentially determining if devices have been modified to allow root access. This is important for security-sensitive applications to prevent malicious activities.

With the progress and development of Rootbeer, we’ve been able to track the work efficiency of our developers and their recent progress on the application.



This scatter plot collected data based on the files (key-value pairs) that were contributed to by specific developers. It displays the amount of work specific developers have done throughout the progress of the application. The source files that were considered were Java, C++, Kotlin, and XML, as these extensions make up a large portion of Rootbeer.

Some key details from this are the involvement of Scott Alexander-Bown and Matthew Rollings, as they’ve consistently contributed to Rootbeer since the beginning. On the other hand, developers such as Ali Waseem, Ivan Vlasov, Stefan M, and Slim Namouchi haven’t been making many contributions.

Recently, our developers have been working to implement Gradle, helping with task automation and optimizing the handling and management of our libraries. Additionally, our team has been trying to fix bugs related to root detection on Android 14+ emulated devices.

## Lab Comments

The Git commands that helped me with this lab were “git branch,” as I sometimes had to check which branch I was working on. Also, “git status” and “git log” were very useful. The status command helped me see what changes and commits needed to be staged and pushed to the repository. The log command was particularly useful as I had trouble with my token and forgot to remove it before committing. It helped me see which commits needed to be reverted. Link to forked repository. (<https://github.com/JaisonNoah808/msrLab>)